

CLAIMS

What is claimed is:

1. A call processing system comprising:
a call processing platform coupled, via digital data links, to a plurality of facilities for which calling services are provided, said call processing platform being discrete from and coupled to a carrier network for providing calling connections, wherein said call processing platform includes call application management functionality controlling connecting calls over said digital data links and terminating in ones of said facilities to said carrier network through said call processing platform.
2. The system of claim 1, wherein said call processing platform is disposed remotely with respect to ones of said plurality of facilities.
3. The system of claim 1, wherein said digital data links provide voice over Internet protocol data communication between said plurality of facilities and said call processing platform to carry call content as digital data.
4. The system of claim 1, wherein facilities of said plurality of facilities comprise controlled environment facilities.
5. The system of claim 4, wherein said controlled environment facilities comprise a prison facility.
6. The system of claim 1, wherein said calling services comprise prepaid calling.
7. The system of claim 1, wherein said calling services comprise postpaid calling.
8. The system of claim 1, wherein said calling services comprise collect calling.
9. The system of claim 1, further comprising:
call processing gateways associated with ones of said plurality of facilities, wherein said call processing gateways operate to provide interfacing between analog user terminals and said digital data links.
10. The system of claim 9, wherein said call processing gateways provide interfacing between at least one analog telephone line interface and said digital data links.

11. The system of claim 10, wherein said call processing gateways are operable to place at least two user terminals disposed at a facility of said plurality of facilities in communication using said at least one analog telephone interface while providing call content data of said at least two user terminals in communication to said call processing platform via said digital data links.

12. The system of claim 9, wherein said call processing gateways comprise voice over Internet protocol gateways.

13. The system of claim 9, wherein said call processing gateways provide at least one local area network interface for coupling a computer workstation to said call processing platform via said digital data links.

14. The system of claim 9, wherein said call processing gateways are disposed at corresponding ones of said plurality of facilities and said call processing platform is disposed remotely with respect to said call processing gateways.

15. The system of claim 1, wherein said call processing platform places said calls on said carrier network as digital packets.

16. The system of claim 1, wherein said call processing platform places said calls on said carrier network as analog signals.

17. The system of claim 16, wherein said call processing platform further includes media gateway functionality, wherein said media gateway functionality cooperates with said call application management functionality for placing said calls on said carrier network as analog signals.

18. The system of claim 1, wherein said call processing platform further includes call recording functionality, wherein said call recording functionality cooperates with said call application management functionality for recording call content.

19. The system of claim 18, wherein said call processing platform further includes billing functionality, wherein said billing functionality cooperates with said call application management functionality for providing real-time call accounting.

20. The system of claim 18, wherein said call processing platform further includes validation functionality, wherein said validation functionality cooperates with said call application management functionality for controlling connecting said calls to said carrier network.

21. The system of claim 18, wherein said call processing platform further includes an enhanced service system for providing services to ones of said plurality of facilities in addition to said calling services.

22. The system of claim 18, wherein said call processing platform further includes a network interface coupled to a signaling network of said carrier network.

23. The system of claim 1, wherein said call processing platform further includes billing functionality, wherein said billing functionality cooperates with said call application management functionality for providing real-time call accounting.

24. The system of claim 1, wherein said call processing platform further includes validation functionality, wherein said validation functionality cooperates with said call application management functionality for controlling connecting said calls to said carrier network.

25. The system of claim 24, wherein said call processing platform further includes justice application management functionality, wherein said justice application management functionality cooperates with said validation functionality for providing investigative information with respect to said calls.

26. The system of claim 24, wherein said call processing platform further includes call treatment functionality coupled to a signaling network of said carrier network, wherein said call treatment functionality cooperates with said validation functionality for determining if calls are to be connected to said carrier network based upon information retrieved from said signaling network.

27. The system of claim 26, wherein said information retrieved from said signaling network comprises a status of an enhanced calling feature associated with a party to the call.

28. The system of claim 1, wherein said call processing platform further includes a network interface coupled to a signaling network of said carrier network.

29. The system of claim 28, wherein said signaling network comprises a signaling system seven network.

30. The system of claim 28, wherein said signaling network interface is utilized in detecting unacceptable calling features available with respect to a called party.

31. The system of claim 1, wherein said call processing platform further includes unauthorized call activity detection functionality, wherein said unauthorized call activity detection functionality cooperates with said call application management functionality for controlling connecting said calls to said carrier network.

32. The system of claim 1, wherein said call processing platform further includes interactive voice response functionality, wherein said interactive voice response functionality provides messaging associated with said controlling connecting calls to said carrier network through said call processing platform.

33. The system of claim 1, wherein said call processing platform further includes an enhanced service system for providing services to ones of said plurality of facilities in addition to said calling services.

34. The system of claim 33, wherein said enhanced service system utilizes calling services data in providing said services in addition to said calling services.

35. The system of claim 33, wherein said enhanced service system utilizes data associated with more than one of said ones of said plurality of facilities in providing said services in addition to said calling services to one of said facilities.

36. The system of claim 33, wherein said enhanced service system comprises a justice application management system for providing back office management of said ones of said plurality of facilities.

37. The system of claim 33, wherein said enhanced service system comprises a justice application management system for providing investigative services to said ones of said plurality of facilities.

38. The system of claim 33, wherein said enhanced service system comprises a commerce system for providing vending services to said ones of said plurality of facilities.
39. The system of claim 1, wherein said carrier network comprises a telephony network.
40. The system of claim 1, wherein said carrier network comprises a SIP carrier.
41. The system of claim 1, wherein said carrier network comprises a MGCP carrier.
42. The system of claim 1, wherein said carrier network comprises the PSTN.

43. A call processing system comprising:
a call processing gateway having at least one user terminal interface and at least one data network interface;
a plurality of user terminals coupled to said call processing gateway through said at least one user terminal interface; and
a call processing platform having at least one data network interface and at least one carrier network interface, wherein said call processing platform and said call processing gateway are coupled through said at least one data network interfaces, and wherein said call processing gateway and said call processing platform cooperate to control establishing a communication link associated with a user terminal of said plurality of user terminals through said at least one carrier network interface such that said call processing platform prevents connection to said carrier network if particular criteria are not met.

44. The system of claim 43, wherein said call processing platform interacts with a user of a user terminal of said plurality of user terminals to obtain information for determining said criteria.

45. The system of claim 43, wherein said criteria comprises said user being allowed to contact a particular called address.

46. The system of claim 43, wherein said criteria comprises a called party presenting an acceptable risk with respect to payment for said call.

47. The system of claim 43, wherein said at least one terminal interface comprises an analog telephone line interface.

48. The system of claim 43, wherein said call processing gateway comprises a voice over Internet protocol gateway device.

49. The system of claim 43, wherein said call processing gateway has at least one data interface for coupling a workstation to said call processing platform via said at least one data network interface.

50. The system of claim 43, wherein said call processing gateway is disposed at a location associated with a facility to which calling services are provided by said call processing system.

51. The system of claim 50, wherein a plurality of call processing gateways are disposed at said location, said plurality of call processing gateways including said call processing gateway.

52. The system of claim 51, wherein said plurality of call processing gateways are networked to provide a desired amount of communication bandwidth to said facility.

53. The system of claim 43, wherein said call processing platform is disposed remotely with respect to said call processing gateway.

54. The system of claim 53, wherein said call processing gateway has at least one carrier network interface to establish a communication link associated with a user terminal of said plurality of user terminals through said at least one call processing gateway carrier network interface.

55. The system of claim 54, wherein said call processing platform operates to establish a communication link associated with a user terminal of said plurality of user terminals through said at least one call processing platform carrier network interface when a terminating user terminal of said communication link is disposed outside a toll-free calling area associated with said user terminal of said plurality of user terminals, and wherein said call processing platform operates to control said call processing gateway to establish a communication link associated with said user terminal of said plurality of user terminals through said at least one call processing gateway carrier network interface when said terminating user terminal of said communication link is disposed inside said toll-free calling area associated with said user terminal of said plurality of user terminals.

56. The system of claim 55, wherein a data stream including content exchanged between said user terminal of said plurality of user terminals and said terminating user terminal of said communication link is provided by said call processing gateway to said call processing platform after said call processing gateway is controlled to establish said communication link.

57. The system of claim 43, wherein said carrier network interface comprises a digital interface and said call processing platform places calls on said carrier network in digital format.

58. The system of claim 43, wherein said carrier network interface comprises an analog interface and said processing platform places calls on said carrier network in analog format.

59. A method for processing calls comprising:
coupling a centralized call processing platform to a call processor gateway via a high bandwidth data connection;
coupling a plurality of user terminals to said call processor gateway via a plurality of analog connections;
converting between a data format and an analog signal by said call processor gateway;
routing a data stream associated with a user terminal of said plurality of user terminals provided by said converting step from said call processor gateway to said centralized call processing platform, wherein said data stream includes communication content from said user terminal;
controlling, by said centralized call processing platform, placing said user terminal in communication with another user terminal; and
recording said communication content by said centralized call processing platform.

60. The method of claim 59, wherein said controlling placing said user terminal in communication with another user terminal comprises operation of a call management algorithm operable at said centralized call processing platform allowing and disallowing connections between user terminals.

61. The method of claim 59, further comprising:
coupling said centralized call processing platform to a carrier network via a digital interface, wherein said user terminal is placed in communication with said another user terminal via said digital carrier network interface.

62. The method of claim 59, further comprising:
coupling said centralized call processing platform to a carrier network via an analog interface, wherein said user terminal is placed in communication with said another user terminal via said analog carrier network interface.

63. The method of claim 59, further comprising:
coupling said call processor gateway to a carrier network via a digital interface, wherein said user terminal is placed in communication with said another user terminal via said digital carrier network interface.

64. The method of claim 63, wherein said data stream continues to be routed to said centralized call processing platform when said user terminal is placed in communication with said another user terminal by said call processor gateway.

65. The method of claim 59, further comprising:
coupling said call processor gateway to a carrier network via an analog interface, wherein said user terminal is placed in communication with said another user terminal via said analog carrier network interface.

66. The method of claim 65, wherein said data stream continues to be routed to said centralized call processing platform when said user terminal is placed in communication with said another user terminal by said call processor gateway.

67. The method of claim 59, further comprising:
determining if said another user terminal is disposed within a toll-free calling area with respect to said user terminal, wherein said controlling placing said user terminal in communication with said another user terminal utilizes a carrier network interface of said call processor gateway when said another user terminal is disposed within said toll-free calling area, and wherein said controlling placing said user terminal in communication with said another user terminal utilizes a carrier network interface of said centralized call processing platform when said another user terminal is disposed outside of said toll-free calling area.

68. The method of claim 59, wherein said plurality of user terminals include telephones for calling outside of a facility associated with said plurality of user terminals.

69. The method of claim 59, wherein said plurality of user terminals include telephones restricted to calling inside of a facility associated with said plurality of user terminals.

70. The method of claim 59, wherein said user terminal and said another user terminal are disposed inside of a facility associated with said plurality of user terminals.

71. The method of claim 59, further comprising:
analyzing said communication content for particular utterances.

72. The method of claim 59, wherein said controlling placing said user terminal in communication with said another user terminal comprises:
validating call data.

73. The method of claim 72, wherein said validating call data comprises:
determining if an enhanced calling feature is activated with respect to said another user terminal.

74. The method of claim 72, wherein said validating call data comprises:
determining if billing said another user terminal presents an acceptable collection risk.

75. The method of claim 59, further comprising:
monitoring said communication content by said centralized call processing platform to determine if unauthorized call activity is detected.

76. A call processing system comprising:

a call processing platform coupled, via digital data links, to a plurality of facilities for which calling services are provided, wherein said call processing platform includes call application management functionality controlling connecting calls over said digital data links and terminating in ones of said facilities to said carrier network through said call processing platform, wherein said call processing platform further includes information management functionality controlling sharing, among said plurality of facilities, data associated with said calls connected through said call processing platform.

77. The system of claim 76, wherein said call processing platform is disposed remotely with respect to ones of said plurality of facilities.

78. The system of claim 76, wherein said digital data links provide voice over Internet protocol data communication between said plurality of facilities and said call processing platform to carry call content as digital data.

79. The system of claim 76, wherein facilities of said plurality of facilities comprise controlled environment facilities.

80. The system of claim 79, wherein said controlled environment facilities comprise a prison facility.

81. The system of claim 76, further comprising:

call processing gateways associated with ones of said plurality of facilities, wherein said call processing gateways operate to provide interfacing between analog user terminals and said digital data links.

82. The system of claim 76, wherein said call processing platform further includes call recording functionality, wherein said call recording functionality cooperates with said call application management functionality for recording call content.

83. The system of claim 82, wherein said data shared among said plurality of facilities comprises at least a portion of said recorded call content.

84. The system of claim 76, wherein said call processing platform further includes information management functionality, wherein said information management functionality cooperates with said call application management functionality for deriving information with respect to at least one of calls attempted through said call processing platform and calls completed through said call processing platform.

85. The system of claim 84, wherein said data shared among said plurality of facilities comprises at least a portion of said derived call information.

86. The system of claim 76, wherein said call processing platform is discrete from and coupled to a carrier network for providing said call connections.

87. An inmate call processing system comprising:
a voice over Internet protocol gateway disposed at an inmate facility; and
a call processing system coupled to said gateway via a data link, wherein said call processing system provides control of connection to a carrier network by inmates of said facility.

88. The system of claim 87, wherein said inmate facility comprises a facility selected from the group consisting of:

- a prison facility;
- a jail facility;
- a detention facility; and
- a stockade facility.

89. The system of claim 87, wherein said call processing system is disposed remotely with respect to said inmate facility.

90. The system of claim 89, wherein said call processing system is coupled to a plurality of voice over Internet protocol gateways.

91. The system of claim 90, wherein ones of said plurality of gateways are disposed at a plurality of inmate facilities.

92. The system of claim 87, wherein said control of connection to a carrier network is at least in part by validating an inmate's call attempt.

93. The system of claim 92, wherein said validation comprises validating the identity of an inmate making a call.

94. The system of claim 92, wherein said validation comprises validating an acceptable risk is presented with respect to collecting funds for said call from a called party.

95. The system of claim 92, wherein said validation comprises validating a number called by an inmate making a call is at least one of a number not included on a prohibited number database and a number included on an allowed number database.